

BaracodaManager C&S Installation & User Guide for BlackBerry platform

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SUMMARY

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Revision History

Changes to the original manual are listed below.

Document	Date	Description
1.18	11 th March 10	Initial release
1.19	19 th March 10	Version incremented
1.20	25 th November 10	Added event injection settings for RIM OS 6
1.22	11 th April 11	Added DFly2 to supported readers and memorize autoconnect state

Introduction

This document explains how to install, configure and use the BaracodaManager C&S software on the BlackBerry platform.

You can download all software updates and additional documentation from our website:

<http://www.baracoda.com/>

Please note that the Connect and Scan version of the BaracodaManager for Blackberry works only with the following Baracoda reader models:

- **Pencil2 with firmware version 1.34 or newer**
- **D-Fly with firmware version 1.34 or newer**
- **D-Fly2**
- **RoadRunners Evolution with firmware version 1.34 or newer**
- **DualRunners with firmware version 1.34 or newer**

1. System requirements

1.1. Supported Hardware

The BaracodaManager C&S works on Blackberry devices having **RIM OS v4.6 and newer (v5, v6)**. It has been tested on the following platforms:

- BlackBerry 9000 Bold and newer
- Blackberry 9800 Torch

Clients who use BlackBerry devices with an older version of RIM OS should contact their mobile operator in order to upgrade the devices.

Inquiries about compatibility on other Blackberry telephones can be sent to Baracoda technical support: support@baracoda.com

1.2. Peripherals supported

Baracoda RoadRunners Evolution

Baracoda DualRunners

Baracoda Pencil2

Baracoda D-Fly

Baracoda D-Fly2

1.3. Memory and Disk Space Requirements

You must have at least 32MB of memory and 190MB of hard disk space for a minimal installation of the base system.

1.4. Software Requirements

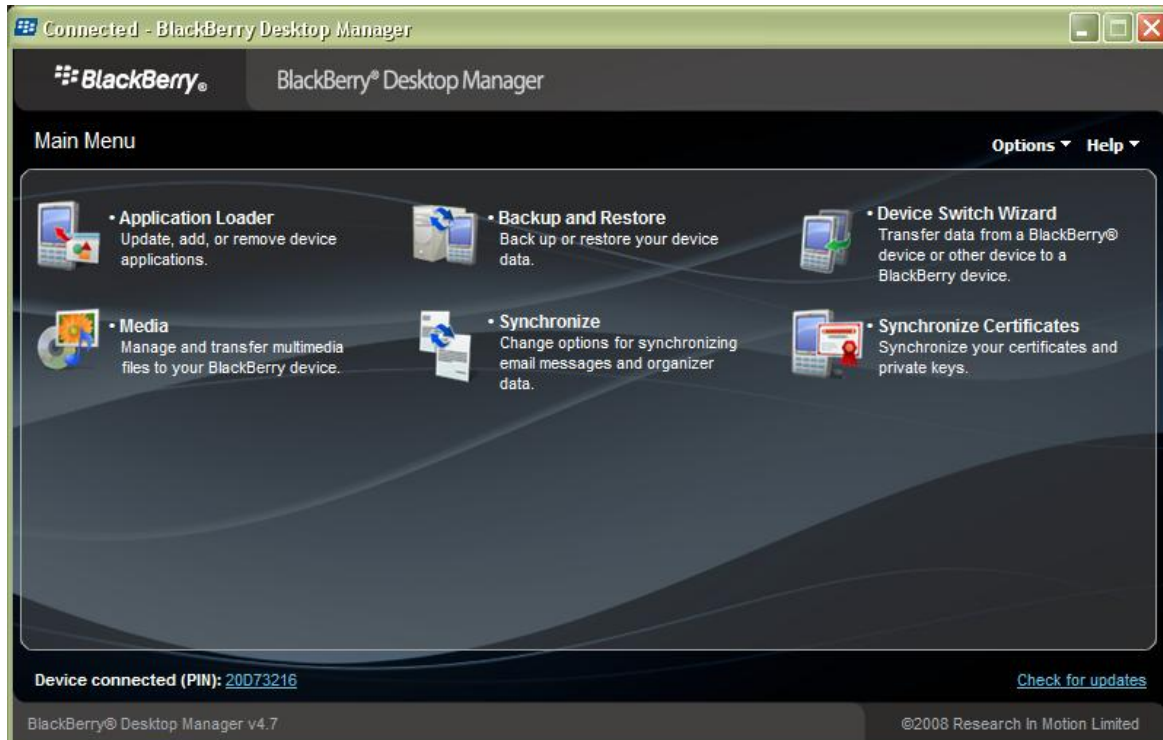
BlackBerry Desktop Software 4.2.2, you can download it from the following location: <http://na.blackberry.com/eng/services/desktop>.

BlackBerry Enterprise Server 4.0 and newer

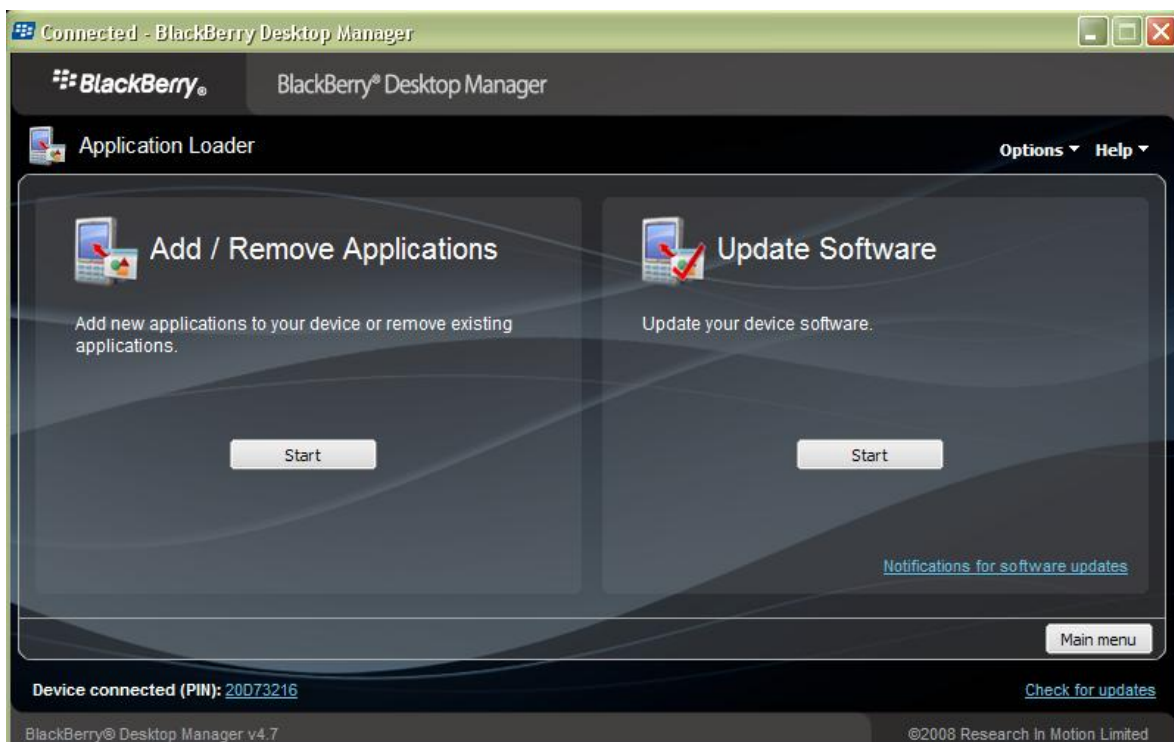
2. Installing the BaracodaManager on a BlackBerry device

2.1. Procedure

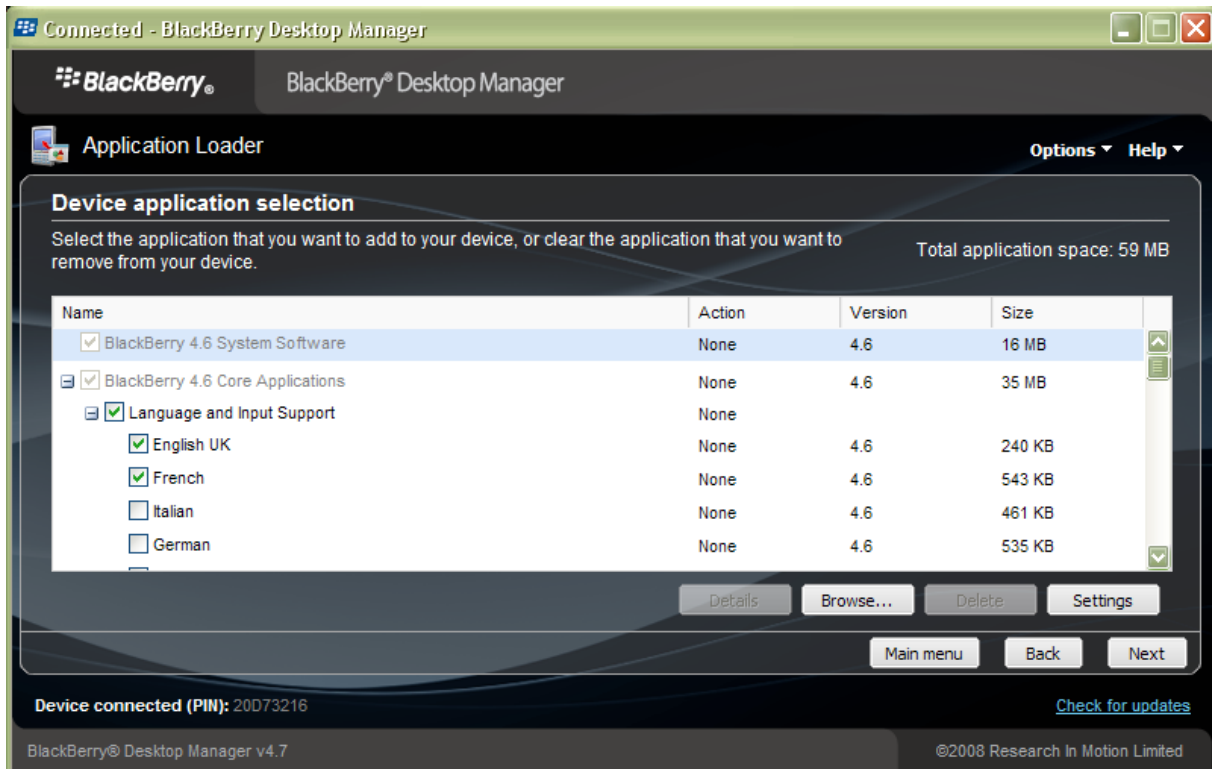
a) Connect your Blackberry to the PC and launch the Blackberry Desktop Manager:



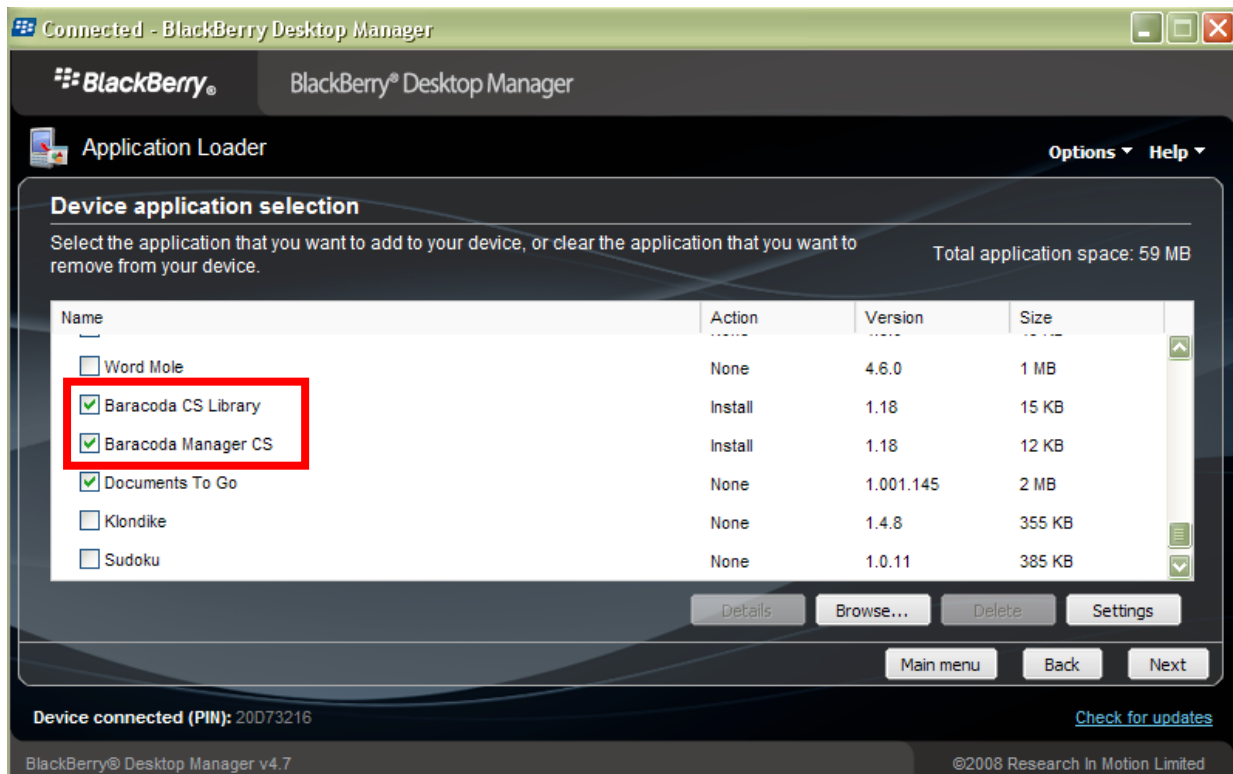
b) Double click the Application Loader shortcut:



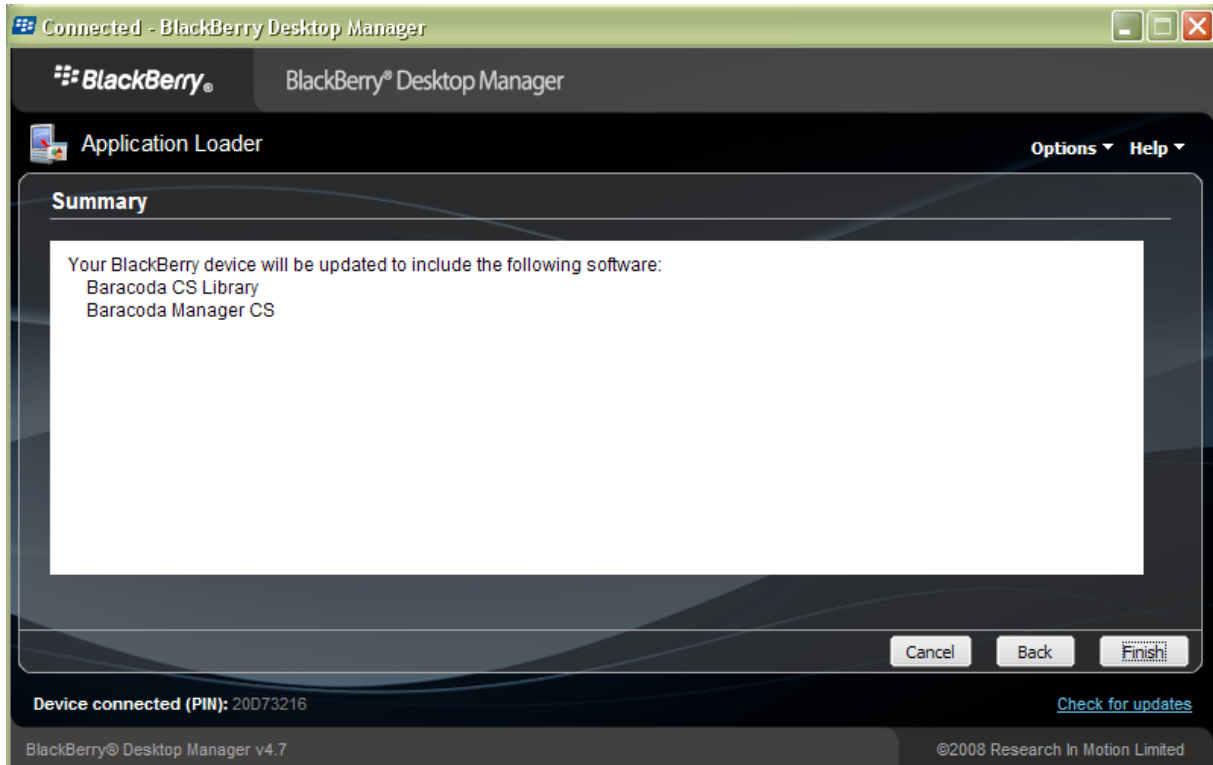
- c) Click the Start on the Add/Remove Applications panel and wait until the Blackberry Desktop Manager detects the applications installed on your Blackberry:



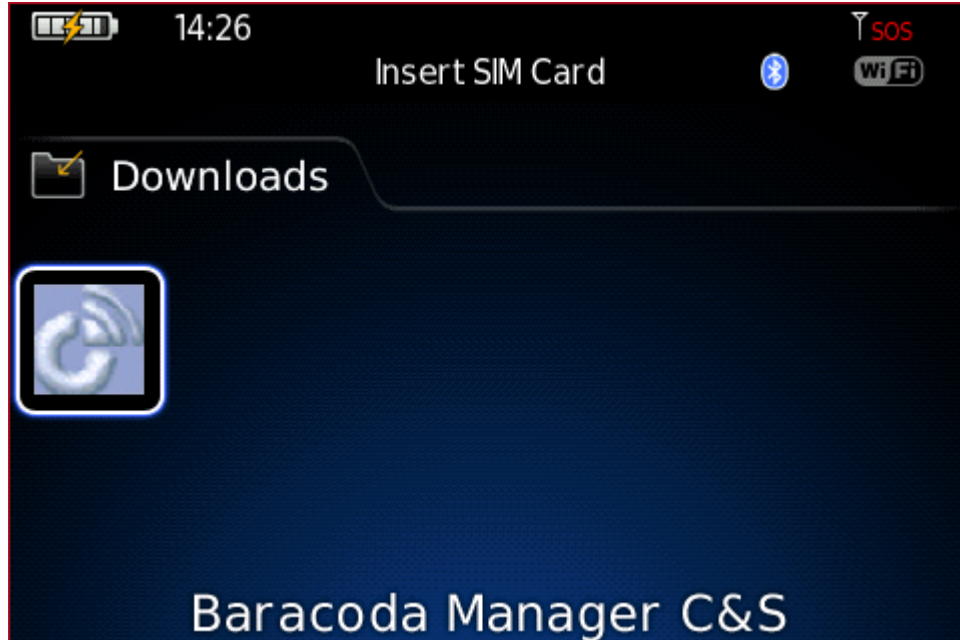
- d) Click the Browse button and navigate to the directory with the BM_CS_vxxx.alx installation file, select that file and click Open. Verify that “Baracoda CS library” and “Baracoda Manager CS” have been added to the list of applications to install:



e) Click the Next button to install the BaracodaManager C&S:



f) Click the Finish button. Check that the BaracodaManager C&S has been installed by verifying the presence of its shortcut either on the main screen or in the Downloads directory:



Before the BaracodaManager C&S application is fully functional, your device needs to be configured so that it allows Keyboard Event Injection for each target application. This configuration is described in the next paragraph.

3. BaracodaManager control policy configuration to support peripherals using Event Injector API

3.1. Background

Peripheral devices (for example, Bluetooth enabled keyboards or barcode scanners) can use the EventInjector application programming interface (API) to simulate events such as user interface (UI) navigation and key presses on the BlackBerry device. This means you need to change all programs security settings. In order for these calls to be allowed on BlackBerry devices connected to a BlackBerry Enterprise Server, Event Injection must be enabled by the BlackBerry Enterprise Server administrator through Application Control for the application component of the peripheral.

To enable Event Injection for the third-party application, complete the procedure that corresponds with the BlackBerry Enterprise Server software version you are running or change directly configuration on your device.

Step 1. Modify the security settings of the Baracoda Manager to allow event injection

Step 2. Modify the security settings on all 4.2 list of applications (Pad, messenger, ...)

3.2. Settings on Blackberry device

For Blackberry smartphones with RIM OS earlier than 6.0 go to:

1. Options -> Advanced Options -> Applications
2. **BaracodaLib_CS**
3. Edit Permissions (by pressing the track ball)
4. Scroll down to Interactions
5. Press the track ball and select "Allow" for "Interactions" (on some devices it may also be necessary to select "Allow" for "Security timer reset")
6. Make sure you "Save" the changes & escape back to the main screen
7. Now repeat steps 2-6 for **BaracodaManager CS**

For Blackberry smartphones with RIM OS 6.0 go to:

1. Options -> Device -> Application Management
2. **BaracodaLib_CS**
3. Edit Permissions (by pressing the track ball)
4. Scroll down to Interactions
5. Press the track ball and select "Allow" for "Interactions" (on some devices it may also be necessary to select "Allow" for "Security timer reset")
6. Make sure you "Save" the changes & escape back to the main screen
7. Now repeat steps 2-6 for **BaracodaManager CS**

Check now the following process to configure BlackBerry Enterprise Server Software.

3.3. For BlackBerry Enterprise Server Software version 4.1

1. Create an applications folder in **Program Files\Common Files\Research In Motion\Shared**.
2. Create a subfolder under the **Program Files\Common Files\Research In Motion\Shared\applications** directory for the BaracodaManager application. Copy the handheld installation files (.ALX & .COD) files to this directory.
3. Index the applications by specifying the loader **/index** command from the command prompt:
 - a) Go to: C:\Program Files\Common Files\Research In Motion\Apploder
 - b) Type the command: **Loader.exe /Index**
4. On the BlackBerry Enterprise Server, open BlackBerry Manager.
5. In the left pane, click **BlackBerry Domain**.
6. In the right pane, select the **Software Configurations** tab.
7. Select a software configuration and click **Edit Software Configuration** or click **Add New Configuration**.
8. Type a name for the new configuration. You can type a description, but this is optional.

In the **Device Software Location** field, enter the UNC path of the shared folder **C:\Program Files\Common Files\Research In Motion**. The standard UNC format is **\\servername\sharename\path\filename**.

Note: For more detailed information on BlackBerry Device Software Configurations, see the appropriate [BlackBerry Enterprise Server 4.1: System Administration Guide](#).

9. Click **Policies**.
10. Complete one of the following tasks:
 - To modify an existing application control policy, select it from the left pane and click **Properties**.
 - OR
 - To create a new application control policy, click **New** and type the required information. For more information, see the [BlackBerry Enterprise Server 4.0: Handheld Management Guide](#).
11. Locate the label for Event Injection and change the setting to **Allowed**.
12. Click **OK** on the Properties window and the Policies window.
13. Expand the Application Software tree.
14. Complete one of the following tasks:
 - To enable Event Injection for one third-party application, in the **Policy** column, select the appropriate application control policy from the drop-down list.
 - OR
 - To enable Event Injection for all third-party applications, select the application control policy at the upper application level.

3.4. For BlackBerry Enterprise Server software version 4.0

1. Create an applications folder in **Program Files\Common Files\Research In Motion\Shared**.
2. Create a subfolder under the **Program Files\Common Files\Research In Motion\Shared\applications** directory for the BaracodaManager application. Copy the handheld installation files (.ALX & .COD) files to this directory.
3. Index the applications by specifying the loader **/index** command from the command prompt:
 - o Go to: C:\Program Files\Common Files\Research In Motion\Apploder
 - o Type the command: **Loader.exe /Index**
4. On the BlackBerry Enterprise Server, open the BlackBerry Handheld Configuration Tool.
5. In the left pane, click **Software Configurations**.
6. Select a software configuration and click **Edit Software Configuration**.
7. Click **Add New Configuration**.
8. Type a name for the new configuration. You can type a description but this is optional.
9. In the **Handheld Software Location** field, click **Change** and browse to the location of the C:\Program Files\Common Files\Research In Motion folder. You can also type the location in standard UNC format (e.g., \\servername\sharename\path\filename) or navigate from Network Places.

Note: For more detailed information on BlackBerry Device Software Configurations, see the appropriate [BlackBerry Enterprise Server 4.0: Handheld Management Guide](#).

10. Click **Policies**.
11. Complete one of the following tasks:
 - o To modify an existing application control policy, select it from the left pane and click **Properties**.

OR

 - o To create a new application control policy, click **New** and type the required information. For more information, see the [BlackBerry Enterprise Server 4.0: Handheld Management Guide](#).
12. Locate the label for Event Injection and change the setting to **Allowed**.
13. Click **OK** on the Properties window and the Policies window.
14. Expand the Application Software tree.
15. Complete one of the following tasks:
 - o To enable Event Injection for one third-party application, in the **Policy** column, select the appropriate application control policy from the drop-down list.

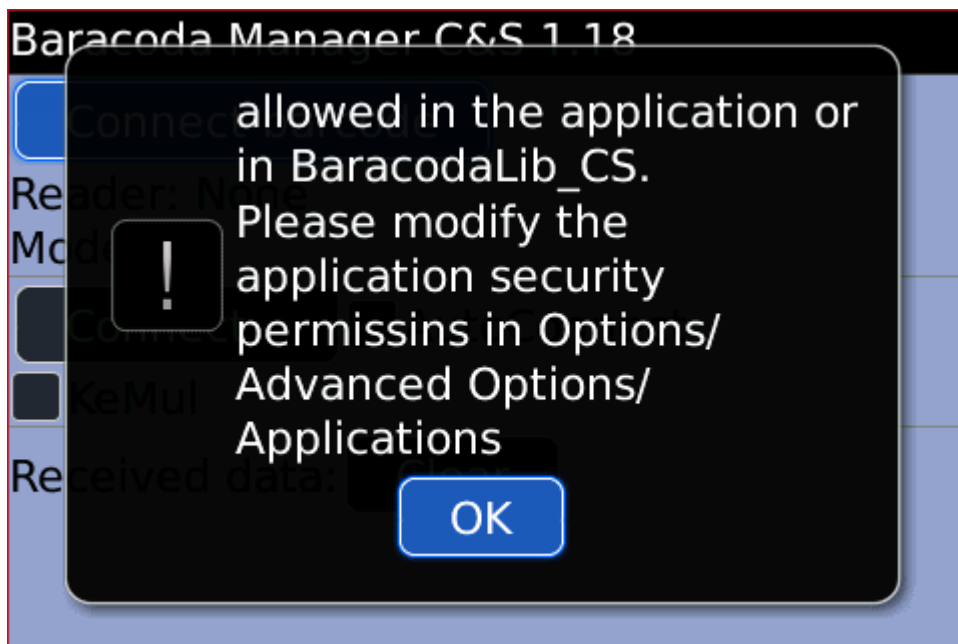
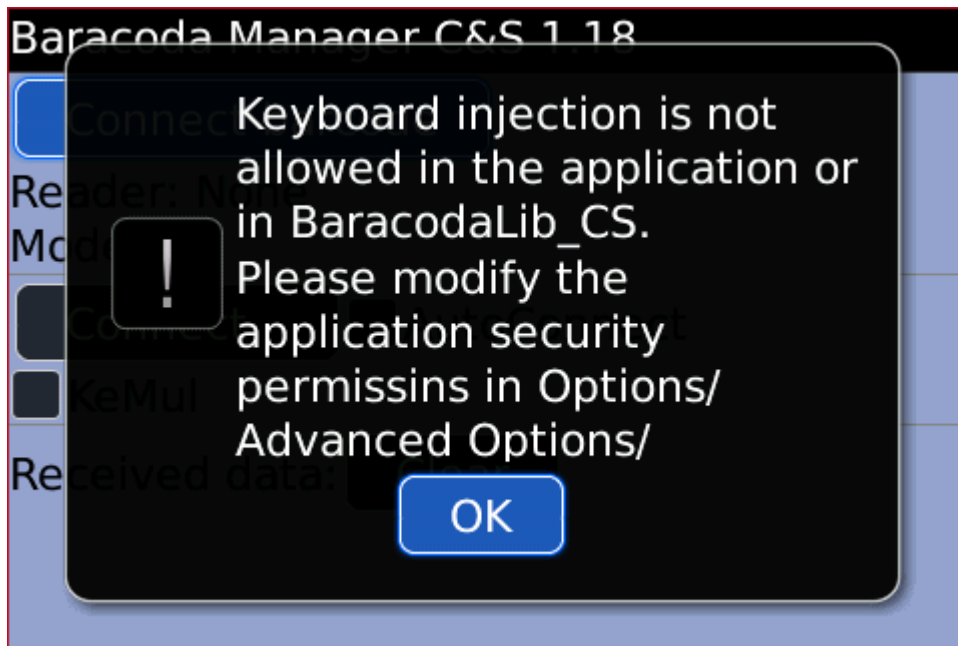
OR

 - o To enable Event Injection for all third-party applications, select the application control policy at the upper application level.

4. BaracodaManager C&S for Blackberry user guide

4.1. Permission check

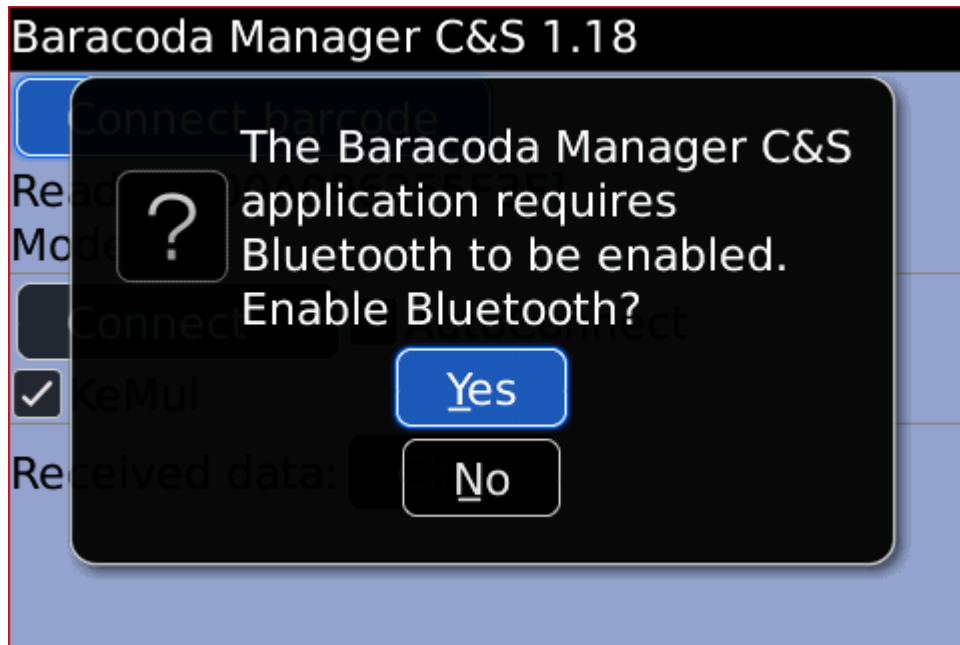
When the BaracodaManager C&S is launched, it will verify if the necessary permissions have been set to allow keyboard emulation, as explained in the [previous chapter](#). In the case where this check fails, the following popup window will be shown:



This security check will also be done whenever the user checks the “KEmul” checkbox. Again, in the case of a failure, the above popup window will be shown and the checkbox will be unchecked. In other words, in order to activate the keyboard emulation feature, the user must set the correct permissions for BaracodaLib_CS and the BaracodaManager, as explained in the [previous chapter](#).

4.2. Bluetooth activation

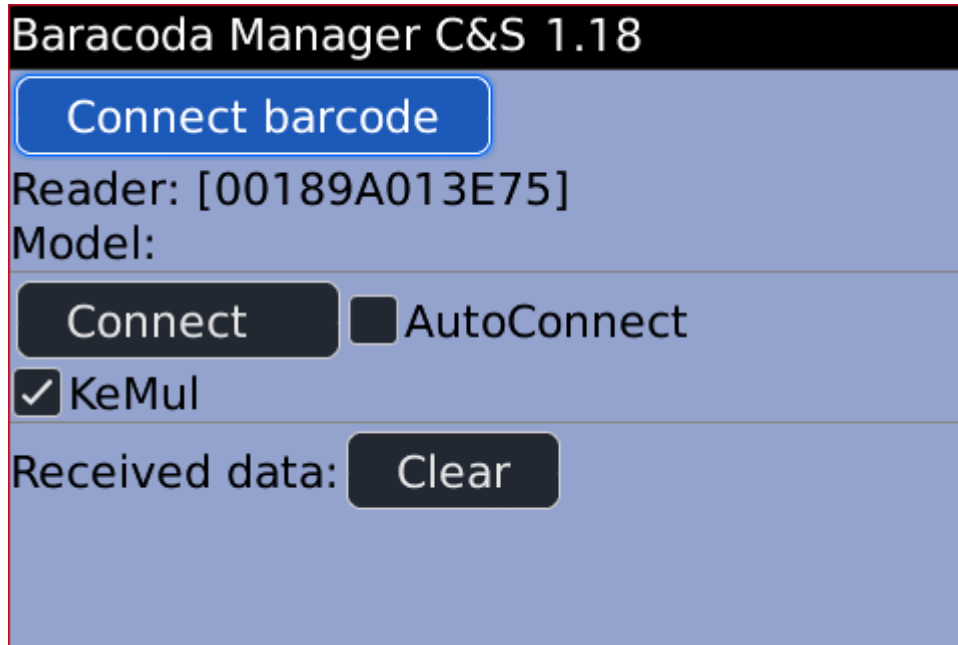
The BaracodaManager C&S needs Bluetooth to be active on the Blackberry telephone. If Bluetooth is disabled on the Blackberry when the Baracoda Manager C&S is started, then the user will be shown the following popup window:



If the user answers 'No' to the above question, the BaracodaManager C&S will exit.

4.3. Connect barcode

If Bluetooth is enabled, the BaracodaManager C&S will be launched without showing any warning windows. The following picture shows the main window of the BaracodaManager C&S application:

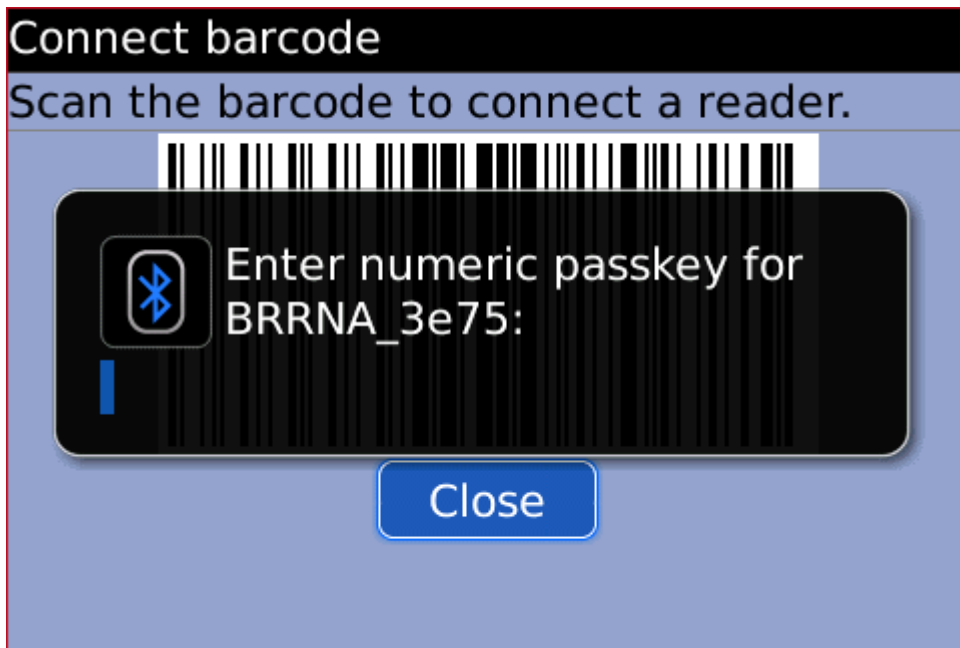


In order to connect a Baracoda Bluetooth reader, the user will need to click the Connect barcode button. When this has been done, the BaracodaManager C&S will show a popup window with the connect barcode:



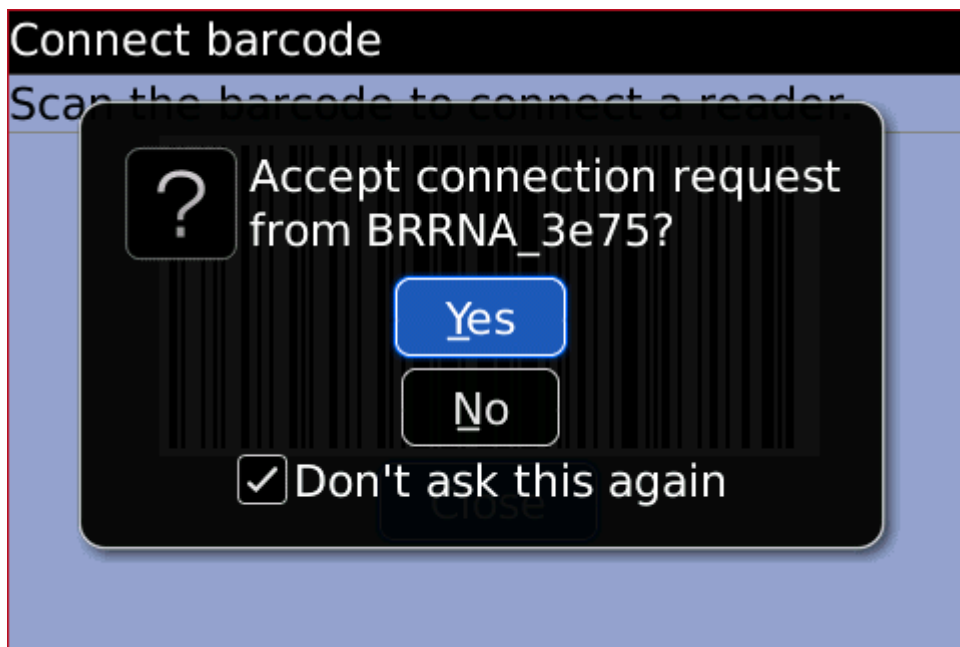
Next, the user should scan this barcode with the reader that is supposed to be connected to the Blackberry. The reader will confirm that the barcode has been scanned by a read beep.

At this moment, the user may be shown a PIN code popup window (this window will appear if the reader is connected to the Blackberry for the first time or if its PIN code has been reset since the last connection):



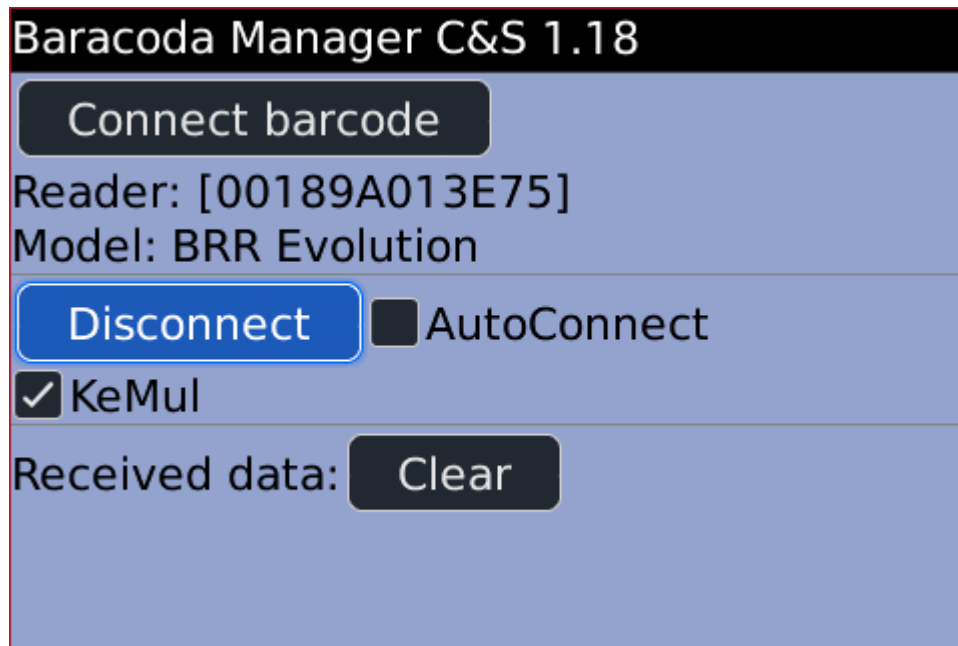
To connect the reader, a "0000" (four times zero) PIN code will need to be entered.

Right afterwards, another popup window may be shown:



Selecting "Yes" will allow the reader to connect. We recommend that the user also check the "Don't ask this again" option so that the popup is not shown when the same reader is connected in the future.

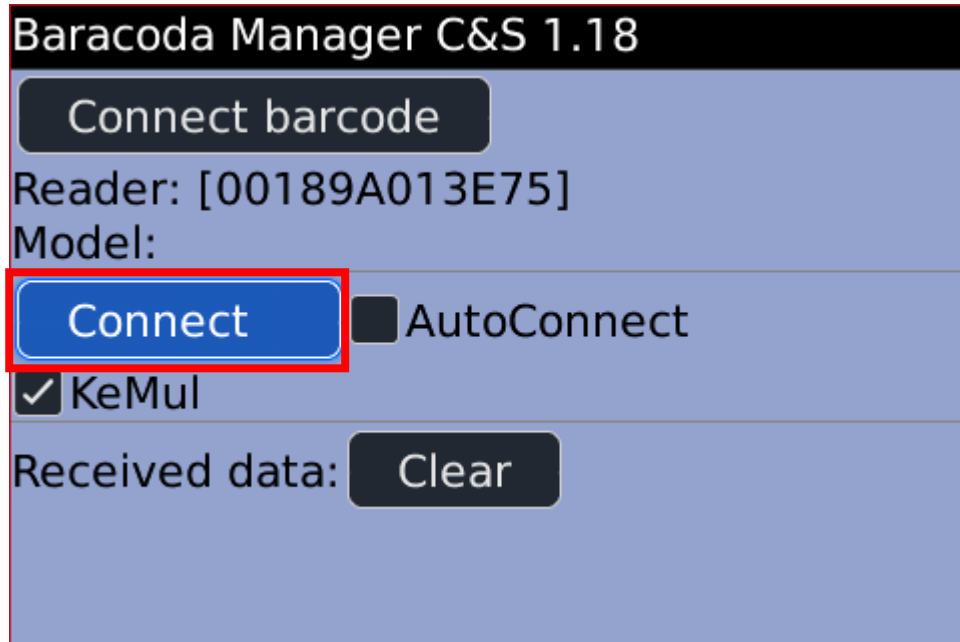
Finally, the Connect barcode window will disappear and the main BaracodaManager C&S window will be activated again:



The Connect button's text has been set to "Disconnect" which signifies that the reader is now connected. Below the Connect barcode button are shown the current reader's address and model.

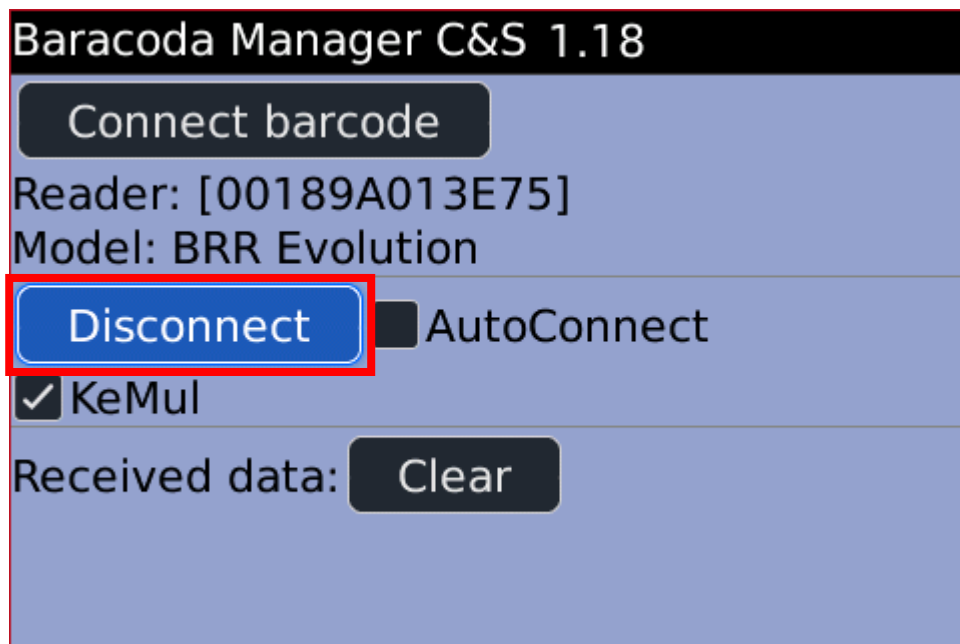
4.4. Reader connection with the Connect button

If the user has already connected at least one reader with the connect barcode, it will be possible to connect the last reader directly from the BaracodaManager C&S main window. To do that, the user will need to click the Connect button, as indicated on the following screenshot:



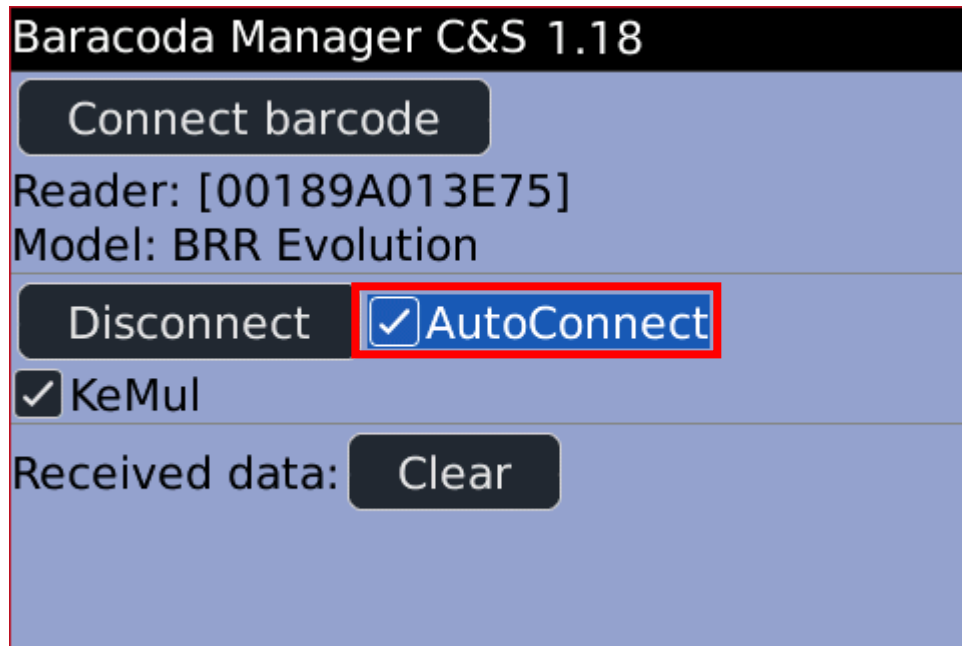
In the case where the reader and the Blackberry need to establish a new security link, the user will be asked to enter the reader's PIN code ("0000" by default).

When the reader has been connected, the Connect button text will change to Disconnect:



4.5. AutoConnect feature

The AutoConnect checkbox can be used to activate the autoconnect feature of the BaracodaManager C&S. It automatically tries to reconnect the current reader if the connection has been lost (because, for example, the reader has been put out of range or has been switched off). As soon as the reader becomes available again, the BaracodaManager C&S will connect to it without user intervention. This checkbox can also be used to connect the selected reader instead of using the Connect button:

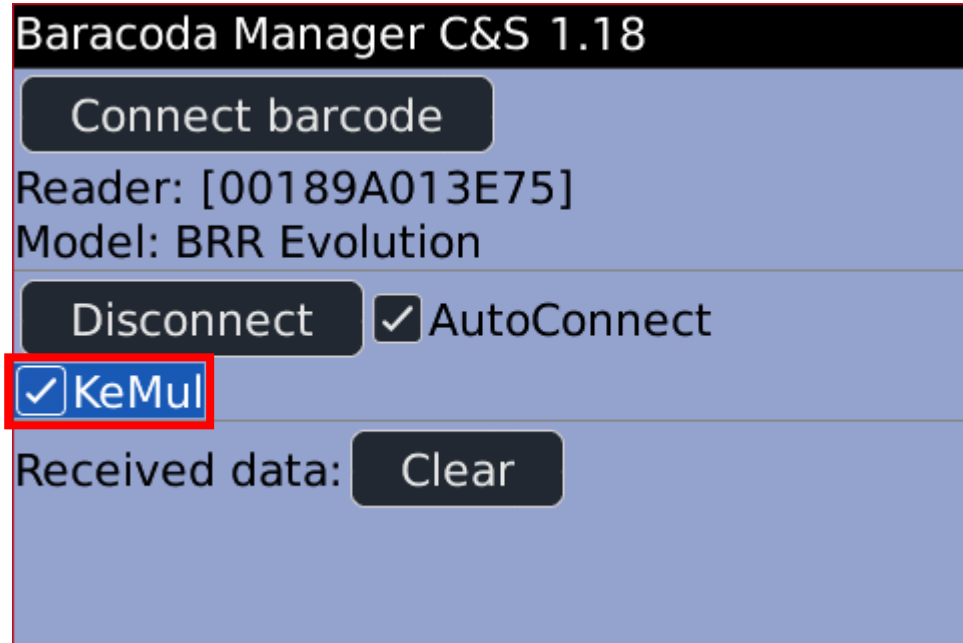


In order to disconnect the currently connected reader, the user can press the Disconnect button. It will also deactivate the autoconnect feature (if it has been activated).

4.6. Keyboard emulation

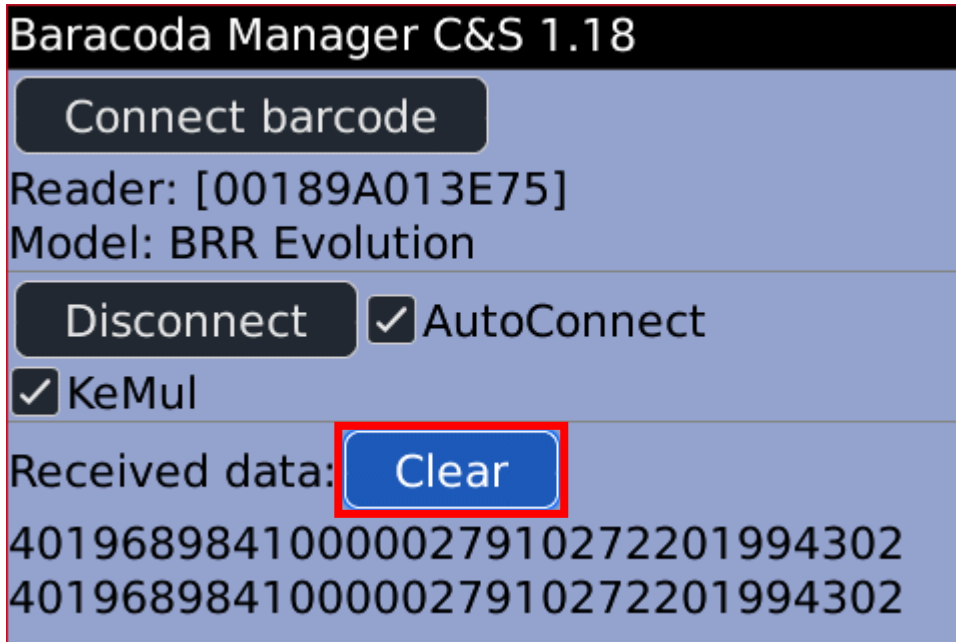
The BaracodaManager C&S can emulate keyboard events corresponding to the barcode/RFID tag ID text read by the connected reader. Please note that the user will need to configure the Blackberry phone before they are able to use this functionality ([see here](#)).

Keyboard emulation state is managed by the KEmul checkbox:



4.7. Received data text field

Any piece of data read by the BaracodaManager C&S will be shown on the text field at the bottom of the screen:



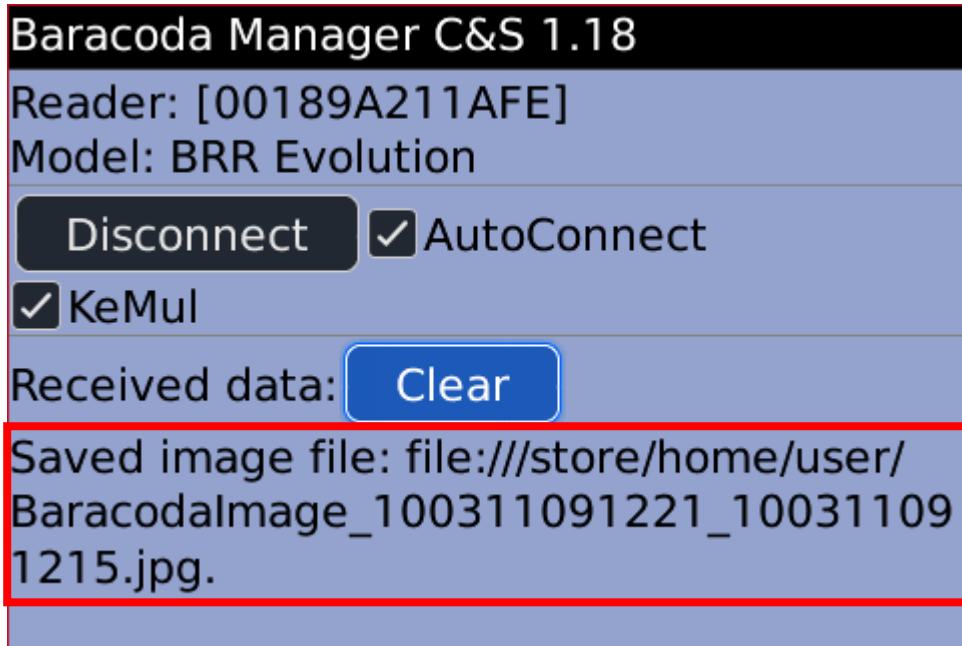
The contents of this text field can be cleared with the Clear button.

4.8. Signature capture

The Baracoda RoadRunners Evolution –FE/FS and DualRunners –FE/FS readers can capture signatures and images since firmware version 1.48. The BaracodaManager C&S for Blackberry will save received images in the /store/home/user directory and the fileformat will be BaracodalImage_AAA_BBB.jpg, where:

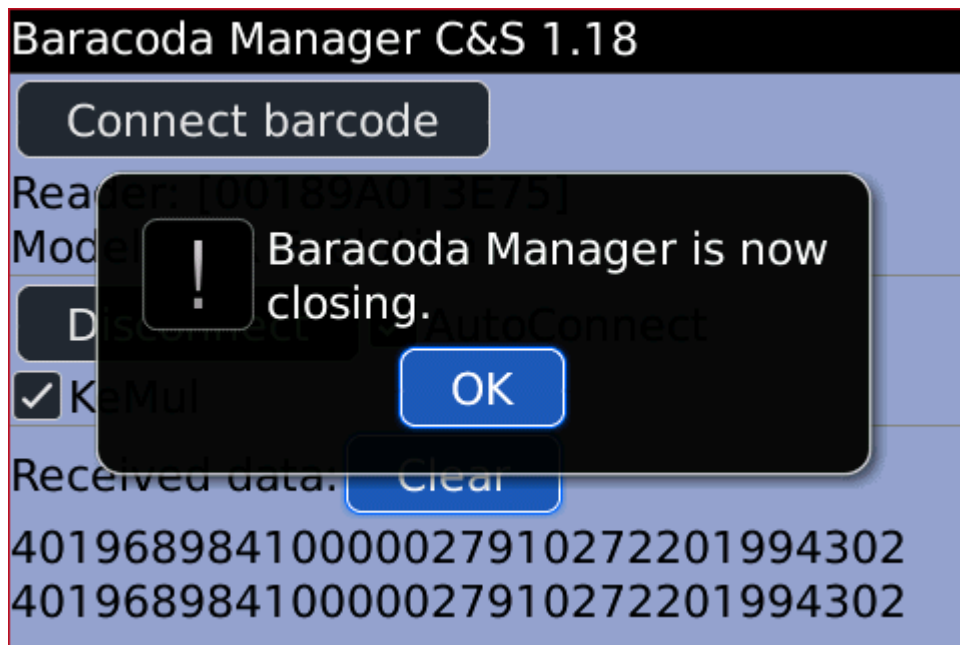
- AAA: Blackberry timestamp (YYMMDDHHmmSS)
- BBB: reader timestamp (if the capture was done while the timestamp option was active on the reader), also using the format YYMMDDHHmmSS. This part will not be present in the filename if the capture was taken with no timestamp on the reader.

The screen capture on the next page shows what information is presented to the user by the BaracodaManager C&S when a signature or image capture is received by the program.



4.9. Quitting the BaracodaManager

When the user quits the BaracodaManager C&S, it will show an information popup before exiting:



The BaracodaManager will save the current reader's Bluetooth address and name and also the autoconnect state so that these parameters can be restored when the application is run afterwards.